

SALEEN SPEEDLAB 15-INCH FRONT BRAKE KIT



INSTALLATION MANUAL: 2004-07 F150 2WD

P/N: 10-8002-C15565A

SALEEN

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***IF YOU ARE NOT EXPERIENCED IN THE
AREA OF AUTOMOTIVE MECHANICS, WE
STRONGLY URGE THAT YOU REFER THIS
INSTALLATION TO A CERTIFIED INSTALLER
OR TECHNICIAN***



Saleen Speedlab 15-inch Front Brake Kit Installation Guide for 2004-2007 F150 2WD

Thank you for buying the Saleen Speedlab 15-inch Front Brake Kit for the 2004-2007 F150 with two wheel drive. We appreciate your business, and we hope you enjoy your product.

For your benefit, please read the following instructions completely and thoroughly before attempting to install the brake kit. Many questions we have received from customers about the installation of our products could have been easily solved by information listed in the accompanying installation guide. We want you to enjoy the product in its fully functional state, and reading this tutorial is the first step to getting you on your way to a more rare and better performing F150.

NOTE: Please keep all hardware you remove from your stock F150, as much of it will be reused to install the new brake kit pieces.

Please take caution in installing this kit; the car will be up on jack stands and the vehicle can fall and cause serious injury if not properly placed on jack stands.

Again, thank you for choosing Saleen!

Tools Required:

- 1/2" Air Impact Tool
- Ratchet (1/2" drive)
- Ratchet (3/8" drive)
- Torque Wrench (300 ft-lb capability)
- 13/16" Deep-Well Socket (1/2" drive)
- 18mm Socket (1/2" drive)
- 36mm Socket (1/2" drive)
- 1/2" Socket (3/8" drive)
- 14mm Socket (3/8" drive)
- 11mm Open-end, Flare-Nut Wrench
- 17mm Open-end Wrench
- 7/16" Box-end Wrench
- Needle-Nose Pliers
- Brake Bleeder Tool
- Medium Size Vise Grips

Materials Required:

- Brake Fluid
- Loctite #262
- Rubber Cap (1/4" ID)

NOTE: The following procedure outlines how to install the brake upgrade on the driver's side. Perform this same procedure on the passenger side.

1. Remove the wheel center cap (see Figure 1).
2. Remove six lug nuts and remove the wheel (see Figure 2).

Remove wheel center cap



Figure 1

Remove six lug nuts and remove wheel

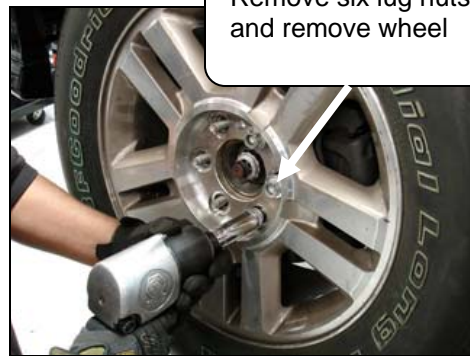


Figure 2

3. Remove the brake caliper from the knuckle as follows:

- a. Remove the two brake caliper
- b. mounting bolts (see Figure 3).
- c. Remove the brake caliper from the knuckle (see Figure 4).
- d. Temporarily hang the caliper from the upper control arm or spring (see Figure 5, next page), making sure not to hang the caliper from the rubber brake hose.

Remove two brake caliper mounting bolts

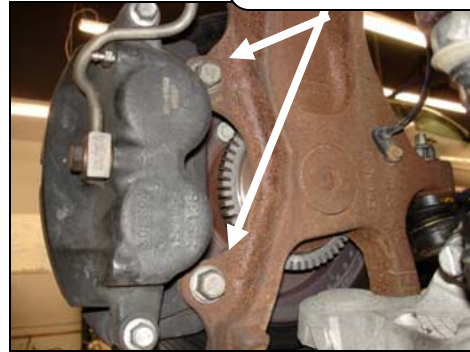


Figure 3

Remove brake caliper

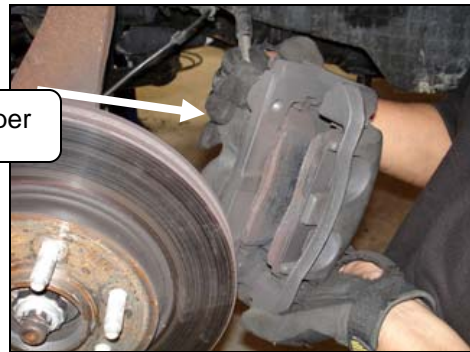


Figure 4

Hang caliper from upper control arm or spring; **note use of bungee cord, do NOT hang caliper from brake line!!**



Figure 5

4. Remove the hub/rotor assembly as follows:
- Remove and discard the cotter pin (see Figure 6).
 - Remove the wheel bearing nut retainer (see Figure 7).
 - Remove and discard the wheel bearing nut (see Figure 8).
 - Remove the hub/rotor assembly (see Figure 9, next page).

Remove and
discard cotter pin



Figure 6

Remove wheel
bearing nut retainer



Figure 7

Remove and
discard wheel
bearing nut

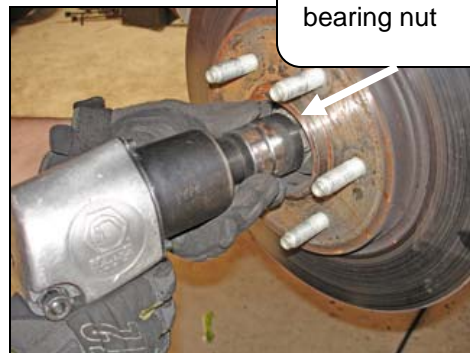


Figure 8

5. Install the NEW hub/rotor assembly as follows:
- Install the new hub/rotor onto the knuckle spindle (see Figure 10).
 - Install a NEW wheel bearing nut and torque to **295 ft-lbs** (see Figure 11). Apply torque seal.
 - Install the original wheel bearing nut retainer and a NEW cotter pin (see Figure 12, next page).

Remove hub/rotor assembly

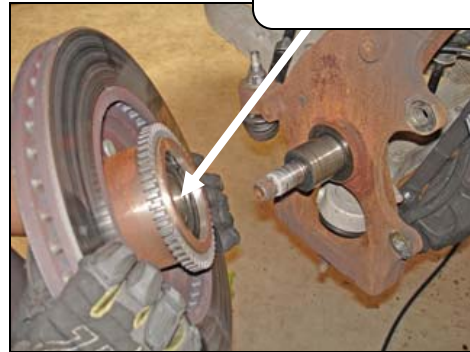


Figure 9

Install new hub assembly

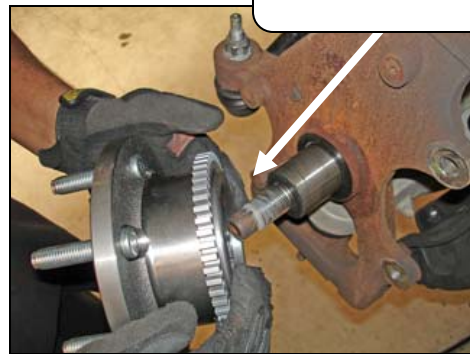


Figure 10

Install NEW wheel bearing nut and torque to **295 ft-lbs**

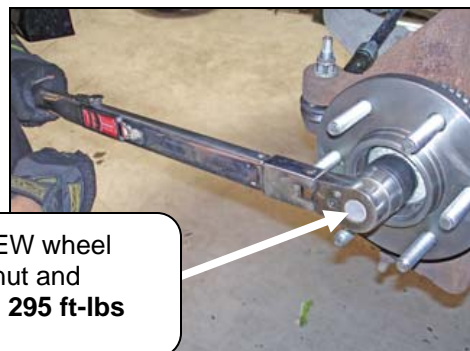


Figure 11

6. Apply Loctite #262 to the caliper bracket mounting bolts. Then, install the NEW caliper bracket and torque the bolts to **148 ft-lb**. (Figure 13) Apply torque seal.

NOTE: Be sure to wash the rotors before installation. Use soap and water, NOT BRAKE CLEANER, to wash the rotors. When cleaned and rinsed properly, the surface of the rotor may show a light rust color, which is normal.

7. Install the NEW brake rotor (Figure 14).

Install wheel bearing nut retainer and NEW cotter pin

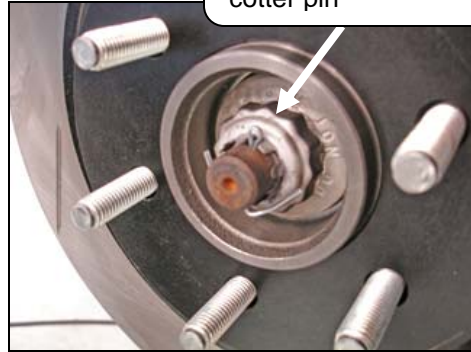


Figure 12

Install NEW caliper bracket and torque bolts to **148 ft-lb**



Figure 13

Apply Loctite #262 to caliper bracket mounting bolts



Install NEW brake rotor



Figure 14

8. Install the NEW brake caliper as follows:

- a. Remove the rubber plug from the banjo fitting threaded hole in new brake caliper assembly (see Figure 15).
- b. Install two copper washers and the bolt onto the banjo-fitting-end of the hose, making sure the flat side of each washer is placed against the banjo fitting. (Figure 16)
- c. Loosely install the NEW brake hose onto the NEW brake caliper. (Figure 17)

Remove rubber plug from banjo fitting threaded hole in new brake caliper assembly



Figure 15

Install two copper washers and bolt onto banjo-fitting-end of hose, making sure flat side of washers are against banjo fitting

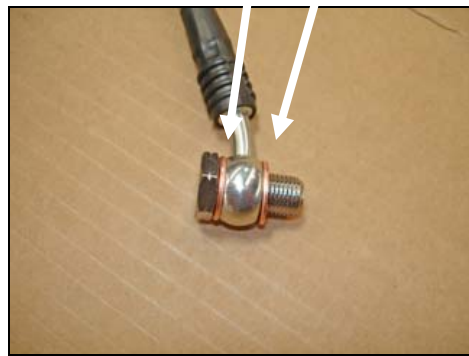


Figure 16

Loosely install NEW brake hose onto NEW brake caliper



Figure 17

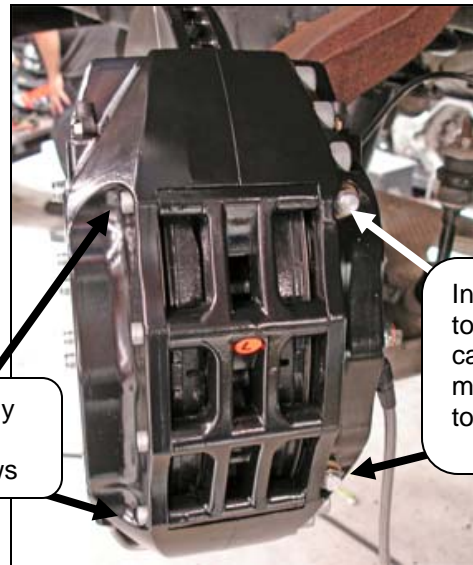
(step 8 cont'd):

- d. Install the NEW brake caliper onto the mounting bracket (see Figure 18).
 - e. Loosen only two 5mm Allen screws on the brake caliper (see Figure 19).
 - f. Install and torque the NEW caliper mounting nuts to **45 ft-lbs** (see Figure 19). Apply torque seal.
 - g. Re-tighten the 5mm Allen bolts on the brake caliper (the ones you loosened to install the caliper mounting nuts) to **8 – 10 ft-lbs**. Refer to Figure 19. Apply torque seal.
9. Install the NEW brake hose as follows:
- a. Remove the existing front brake hose retaining clip (see Figure 20).

Install NEW brake caliper onto mounting bracket



Figure 18



Loosen only these two allen screws

Install and torque NEW caliper mounting nuts to **45 ft-lbs**

Figure 19

Remove existing front brake hose retaining clip

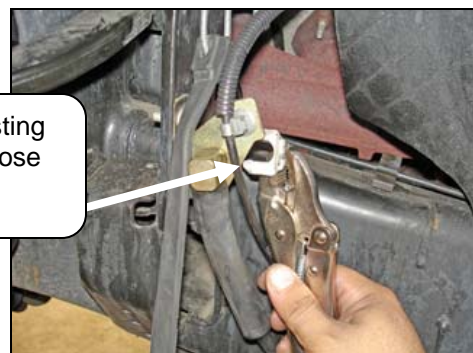


Figure 20

(step 9 cont'd):

- b. Disconnect the hard line from the brake hose (see Figure 21).
- c. Install a rubber cap onto the end of the hard line to prevent brake fluid leakage (see Figure 22).
- d. Remove the brake hose and caliper assembly from the vehicle (see Figure 23).

Disconnect the hard line
from the brake hose

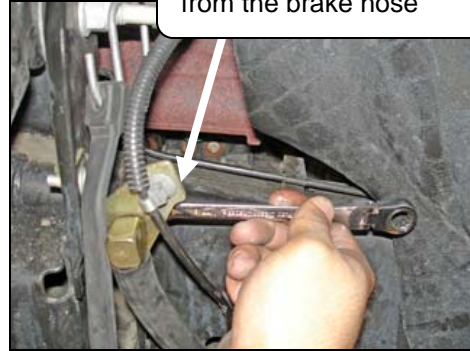


Figure 21

Install rubber cap
onto end of hard
line to prevent
brake fluid leakage



Figure 22

Remove original
brake hose and
caliper assembly

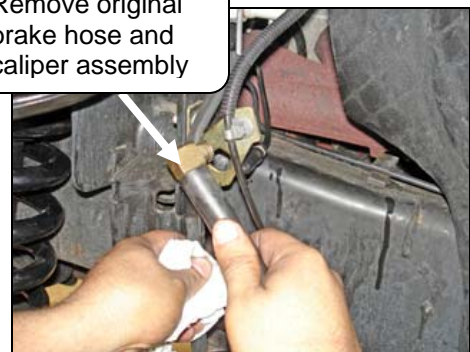


Figure 23

(step 9 cont'd):

- e. Install the NEW brake hose to the frame bracket, so that it points straight down and re-install the original retaining clip (see Figure 24).
- f. Use a backup wrench to tighten the hard line/hose connection, making sure hose points straight down (see Figure 25).
- g. Torque the brake hose banjo fitting to **14 ft-lbs**, making sure the hose points straight up (see Figure 26).

Install NEW brake hose so that it points straight down and re-install original retaining clip



Figure 24

Use a backup wrench to tighten hard line/hose connection, making sure hose points straight down



Figure 25

Torque brake hose banjo fitting to **14 ft-lbs**, making sure hose points straight up

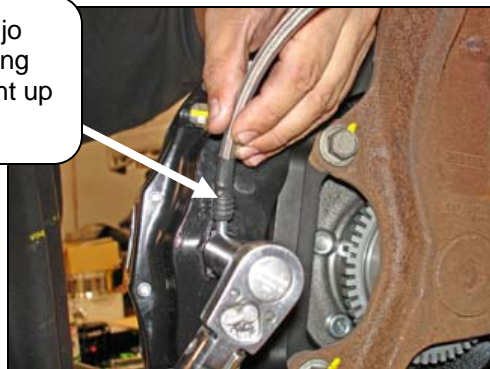
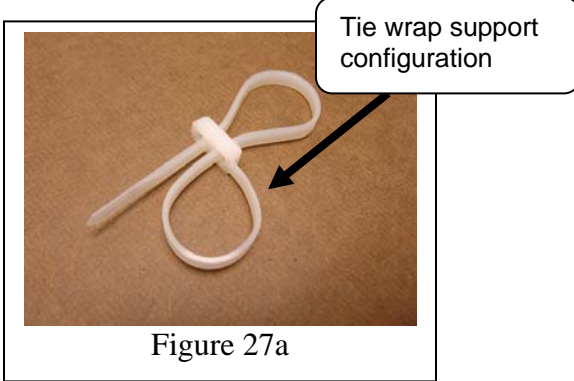
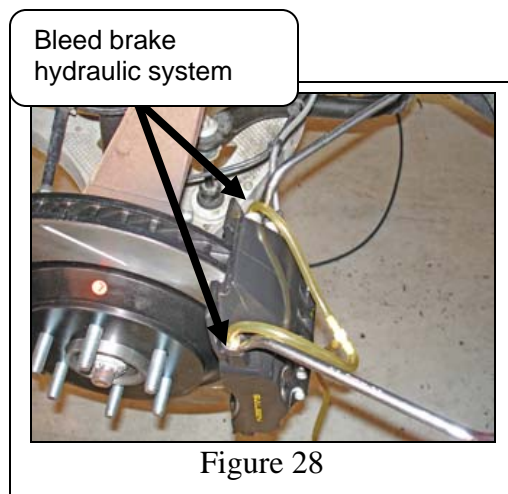
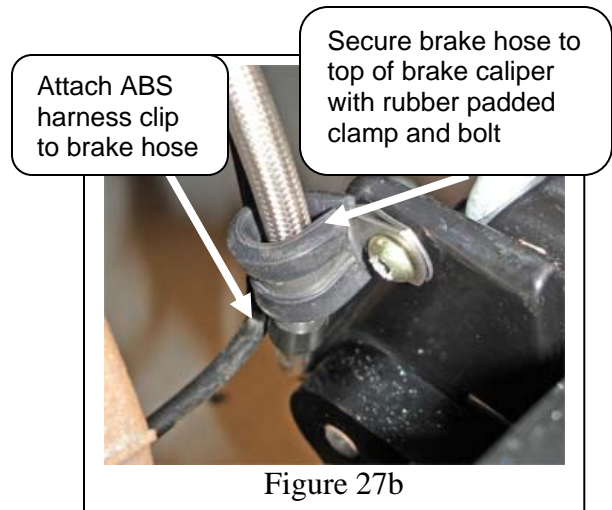
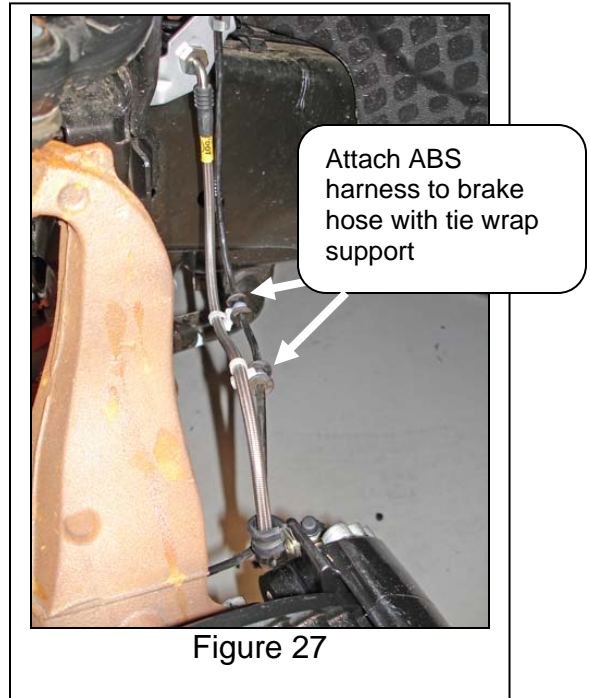


Figure 26



(step 9 cont'd):

- h. Secure the ABS harness to the brake hose with the existing ABS harness clip and a tie wrap support (see Figure 27).
- 10. Perform this procedure on the passenger side of the vehicle.
- 11. Bleed the brake hydraulic system (see Figure 28).
- 12. Follow the bed-in procedure on the following page.





BED-IN PROCEDURE

Rotor Installation & Bed-in Procedure

FAILURE TO READ, UNDERSTAND AND FOLLOW THESE PROCEDURES WILL CAUSE PERMANENT DAMAGE TO YOUR BRAKE ROTORS, AND WILL KEEP THE SYSTEM FROM WORKING AT ITS FULL CAPACITY.

The majority of brake system problems are due to improper installation and/or bed-in of the rotors and pads. By reading and understanding the following, you will avoid the most common causes of poor brake performance and vibration. FAILURE TO READ AND UNDERSTAND THIS MAY CAUSE SERIOUS PERMANENT DAMAGE TO YOUR NEW ROTORS.

Bed-in your new pads and rotors by carefully observing the procedure described on this and the following pages.

Bed-in of rotors and pads is critical to the optimum performance of your new brakes. When bedding-in new parts, you are not only heat-cycling the pads, you are also depositing a layer of pad material onto the rotor face. If not bedded-in properly, an uneven layer of pad material will be deposited onto the rotor, causing vibration. Virtually every instance of a “warped” rotor is attributed to uneven pad deposition.

Note: Saleen rotors must be driven with gentle braking, until the plating is worn off of the rotor faces, BEFORE starting the bed-in procedure. Do not use brakes aggressively until the plating is worn off. This typically takes several miles of city driving.

Typically, a heavy-braking street driver will experience approximately 1 to 1.1G's of deceleration. At this rate, the ABS will be activated on such equipped vehicles. A moderate braking effort is needed to properly bed-in rotors and pads.



If ABS intervention or lock-up were represented as 100% brake effort, a stopping force of approximately 70-80%, just short of ABS intervention or lock-up, is a general estimate of the pedal effort you are trying to achieve.

Note: Bedding-in of pads should not be done in poor weather conditions, nor on wet roads.

After completing the installation, make a series of 10 stops from 60 to 5-10 MPH. At the end of each stop, immediately accelerate to 60 again for the next stop. Run all stops in one cycle.

During the 60 to 5-10 MPH cycle of stops, the exact speed is not critical. Accelerate to approximately 60, then begin braking. As you approach 5-10 MPH, it is not necessary to watch the speedometer. Keep your eyes on the road, and approximate your speed at the end of each stop. **DO NOT COME TO A COMPLETE STOP, WHILE LEAVING YOUR FOOT ON THE BRAKE PEDAL, AS YOU MAY IMPRINT PAD MATERIAL ONTO THE ROTOR, CAUSING A VIBRATION.**

If racing or higher-performance pads are being used, add four stops from 80 to 5-10 MPH, and if full race pads are being used, add four stops from 100 to 5-10 MPH.

There are several indicators to look for while bedding-in the system:

On the 8th or 9th stop, there should be a distinct smell from the brakes. Smoke may also be evident after several stops.

Also on the 8th or 9th stop, some friction material will experience "green fade." This is a slight fading of the brakes. The fade will stabilize, but will not completely go away until the brakes have cooled.

After the bed-in cycle is finished, there will be a blue tint on the rotor, with a light gray film on the rotor face. The blue tint indicates that the rotor has reached the proper bed-in temperature, and the gray film is pad material starting to transfer onto the rotor face. This is normal!

After the first bed-in cycle shown above, the brakes will still not be operating at their best capacity. A second or third bed-in cycle is typically necessary before



the brakes really start to “come in.” A “cycle” is a series of stops, followed by a cool-down.

Saleen does not endorse speeding on public roads. If going above the legal speed limit, do so in a safe area, away from traffic, and at your own risk.

After the final stop of each cycle, drive as much as possible without using the brakes, to cool off the system. Ideally, the brakes should be allowed to cool to ambient temperature before using them again.

Thank you for choosing Saleen!

If you have any further questions, you may reach our technical assistance hotline at 800-888-8945 (Option 4).